

From: [Akhter Hossain](#)
To: [Jump, Christine](#)
Subject: FW: MDL's
Date: Tuesday, February 25, 2014 11:50:51 AM

Chris,
I need to know what you think regarding MDL in the email below.
Thanks

Akhter

From: SMITH, MARTIN L [mailto:smith.martin@cleanharbors.com]
Sent: Monday, February 17, 2014 8:05 AM
To: Akhter Hossain
Subject: FW: MDL's

Akhter, please see the email from our consultant, iSi, and the certifying engineer, below. There are a few requests for your approval regarding the Wichita facility.

Safety Starts With Me: Live It 3-6-5

Martin L. Smith

Director, Corrective Actions and Discontinued Operations
Clean Harbors Environmental Services, Inc.
13652 County Road 180
Carthage, Missouri 64836

417.358-0826 (O)
417.291.2170 (M)
417.359.8746 (F)

smith.martin@cleanharbors.com

www.cleanharbors.com



From: Brady Gerber [mailto:BGerber@isienviromental.com]
Sent: Friday, February 14, 2014 1:02 PM
To: SMITH, MARTIN L
Subject: MDL's

Marty

Please see email below regarding the comparison to reporting limits rather than MDL's. Let me(or Stuart) know if you have any questions.

Thank You

Brady

From: Stuart Klaus [<mailto:sklaus@geostatenvironmental.com>]
Sent: Friday, February 14, 2014 12:48 PM
To: Brady Gerber
Subject: RE: Disregard Last email

Brady,
Proposed E-mail to Martin S & Then to Akhtar (SP?):

Martin,
In comparing the analytical results for the third rinsate water from the Clean Harbor Building B (and also some preliminary results from Building D), it has become apparent that some additional clarification is required for the agreed upon comparison standards. The current comparison standards are KDHE Tier II Risk Based Standards, the secondary standard for comparison is the MDL (Method Detection Limits) - a third criteria or adjustment can be made for analytes that are present in the source water (City of Wichita - Public Water Supply). Where the RSK levels are established the expected values are clear (results above "fail" or below "pass"), the clarification is for those analytes that have no established RSK levels - and MDL's are to be compared.

The difficulty lies in that the MDL does not routinely equal the laboratory reporting limit (RL), typically the RL exceed the MDL - which establishes baseline for detections and non-detections (ND) for given samples. Therefore, samples results that are coming back ND - are still "failing" the comparison to the MDL. Of course when diluted, the RL for a given sample can become several times higher than the MDL. However, even when samples are analyzed without dilutions, RL's are often above the MDL.

For example the sample analyzed that was obtained for source water (City of Wichita) has multiple instances where the MDL levels are not met (although the RL are often very close to the MDLs). The city water sample was not diluted and the majority of the results (as expected for a public water supply) were ND.

There is also a problem when comparing to analytes (typically metals) that do not have RSK levels that are common constituents in water, - they may have secondary drinking water levels based on objectionable levels for hardness or taste - such as calcium, sodium, iron, etc. falling back to MDL's (or even RL's) in this circumstance may be difficult to meet. Even to meet the City of Wichita analytical result for some constituents may be very difficult. For example calcium - a primary constituent in concrete - for water pressure sprayed onto concrete not to pick up some calcium from surface may be unrealistic.

Therefore the suggested path forward is to meeting the RL's (of undiluted samples) for those constituents where RSK levels have not been established. For specific constituents where RSK levels have not been established that are common constituents (calcium, sodium, iron,..) an alternative standard such as provided here:

<http://water.epa.gov/drink/contaminants/secondarystandards.cfm> as also referenced from here: <http://www.kdheks.gov/pws/> is suggested. Other specific constituents beyond those identified in the secondary standards may still need to be addressed in the future and those will be addressed on a case by case basis.

If you have any Q's or concerns please contact me at your convenience.

Thanks

Stuart Klaus

Stuart B. Klaus, P.E.

Senior Engineer

GeoStat Environmental, LLC

Cell: 620 245 4675 | Home: 316 282 4959

Office: 620 241 6090 | Fax: 620 241 6490

sklaus@geostatenvironmental.com

www.geostatenvironmental.com

***** ATTACHMENT NOT DELIVERED *****

This Email message contained an attachment named
image001.jpg

which may be a computer program. This attached computer program could contain a computer virus which could cause harm to EPA's computers, network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name.

For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

***** ATTACHMENT NOT DELIVERED *****